



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/591,727

09/05/2006

Jianbing Huang

90059JLT

3151

1333 7590 04/01/2009
EASTMAN KODAK COMPANY
PATENT LEGAL STAFF
343 STATE STREET
ROCHESTER, NY 14650-2201

EXAMINER

ROBINSON, CHANCEITY N

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

04/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,727	Applicant(s) HUANG ET AL.	
	Examiner CHANCEITY N. ROBINSON	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-33 and 35-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-33 and 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicant's request for reconsideration filed on January 29, 2009 was received. Claims 1-29 and 34 have been canceled. Claim 30 has been amended. Claims 35-40 have been added.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on November 10, 2008.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 30, 31, 33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake et al. (US 2004/0033435 A1) in view of Lewis et al. (US 4,822,722).

Regarding claims 30, 31, 33 and 35-40, Miyake et al. disclose a process for developing exposed printing plate precursors (abstract), comprising: contacting a printing plate precursor

Art Unit: 1795

with a developer composition [0167] and imagewise exposing the printing plate precursor [0165]. Miyake et al. disclose the heat-sensitive coating [0035] of the printing plate precursor comprises a phenolic resin [0040-0042]. Miyake et al. disclose the developer composition is also used as its replenisher [0167]. Miyake et al. disclose the developer composition has a pH preferably from 12.0 to 13.5 (greater than 13 and up to 14) comprising of alkaline developer components selected from alkali silicates, alkali hydroxide and etc [0168-0170] and a mixtures thereof in the water [0179 & 0181]. Miyake et al. disclose the developer composition may further comprise of sodium carbonate, potassium carbonate and etc. [0167]. Also, Miyake et al. disclose the developer composition additionally comprising one or more additives selected from anti-foaming agent and surface active agents (surfactants) [0178].

Further regarding claims 30, 36 and 39, Miyake et al. do not explicitly disclose the amount of carbonate anion in the developer composition. However, Lewis et al. disclose a process of using a high contrast photoresist developer with enhanced sensitive to form positive resist image (abstract) for lithographic processing (column 3, lines 6-10). Lewis et al. disclose a developer composition comprising inorganic salts, preferably a sodium carbonate, a carboxylated surfactant and alkali metal base, preferably potassium or sodium hydroxide (column 3, lines 19-68). Lewis et al. disclose the developer composition contains high concentrations of aqueous potassium hydroxide, a surfactant and potassium carbonate in concentrations ranging between 2 and 8 wt% (examples 17-21 and 23-26), meeting the limitations of the instant disclosure of a carbonate anion in the amount of 1.5 to 20wt% or 2.5 to 12 wt%. Lewis et al. teach the amount carbonate anion aids in providing the developer higher resolution capabilities and provides resist performance that is stable over the life of the developer bath (column 3, lines 10-19). Therefore,

Art Unit: 1795

it would have been obvious to one of ordinary skill in the art at the time of the invention to include the amount of carbonate anion in the developer composition of Miyake et al. because Lewis et al. teach the amount of carbonate anion aids in providing the developer higher resolution capabilities and provides resist performance that is stable over the life of the developer bath.

6. Claims 30-33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Annoura et al. (US 2001/0036595) in view of Lewis et al. (US 4,822,722).

Regarding claims 30-33 and 35-40, Annoura et al. disclose an aqueous developer composition comprising an alkaline developer component selected from alkali silicates, alkali hydroxides, Na_3PO_4 (sodium phosphate), K_3PO_4 , NR_4OH and mixtures thereof in the water [0061-0062 & 0071]. Further, Annoura et al. disclose the developer composition comprises of an alkaline agent (stabilizer) such as sodium carbonate (Na_2CO_3) [0062 & 0070]. Additionally, Annoura et al. disclose the developer composition comprises of one or more additives selected from organic solvents, surfactant, and anti-foaming agents [0072-0073]. Annoura et al. disclose the carbonate anion (potassium carbonate) is 0.1 to 10wt% [0070]. Further, Annoura et al. disclose a process for developing exposed (UV-sensitive positive-working or heat-sensitive) printing plate precursor comprising contacting a printing plate precursor with a developer, wherein the heat-sensitive coating (sensitizing layer) of the printing plate precursor comprises a phenolic resin (novolak resin; [0022 & 0061]).

Further regards to claim 30, Annoura et al. do not explicitly disclose the developer composition having a pH of greater than 13 and up to 14. Lewis et al. disclose a process of using a high contrast photoresist developer with enhanced sensitive to form positive resist image

Art Unit: 1795

(abstract) for lithographic processing (column 3, lines 6-10). Lewis et al. disclose a developer composition comprising inorganic salts, preferably a sodium carbonate, a carboxylated surfactant and alkali metal base, preferably potassium or sodium hydroxide (column 3, lines 19-68).

Examiner notes the pH value of such solutions can be calculated starting from the KOH concentrations and vary between 13.2 and 13.3 ($\text{pH} = 14 - \log [\text{OH}^-]$), which meets the limitation of the instant application of having a pH of 13 to 14. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the pH of the developer composition of Annoura et al. to be greater than 13 and up to 14 composition, because Lewis et al. teach the optimize the pH of the developer aids in providing the developer higher resolution capabilities and provides resist performance that is stable over the life of the developer bath.

Response to Amendment

7. The claim rejections under 35 U.S.C. 102 (e) as being anticipated by Nagase (US 7,141,358 B2) on claims 23-34 are withdrawn, because the claims 23-29 have been canceled and claim 30 has been amended.

8. The claim rejections under 35 U.S.C. 102 (b) as being anticipated by Annoura et al. (US 2001/0036595) on claims 23-34 are withdrawn, because the claims 23-29 have been canceled and claim 30 has been amended.

9. The claim rejections under 35 U.S.C. 102 (b) as being anticipated by Lewis et al. (US 4,822,722) on claims 23-27 are withdrawn, because the claims 23-27 have been canceled.

Response to Arguments

10. Applicant's arguments with respect to claims 30-33 and 35-40 have been considered but are moot in view of the new ground(s) of rejection. Lewis et al. continue to show the amount of

Art Unit: 1795

carbonate anions and pH greater than 13 and up to 14 as recited in claims 30-33 and 35-40.

Annoura et al. continue to show the process for developing exposed printing plate precursors.

Therefore, a new 103 rejection is made in view of Lewis et al. and Annoura et al.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANCEITY N. ROBINSON whose telephone number is (571)270-3786. The examiner can normally be reached on Monday to Thursday: 7:30 am-6:00 pm eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chanceity N Robinson/
Examiner, Art Unit 1795

/Cynthia H Kelly/
Supervisory Patent Examiner, Art Unit 1795